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(71) Applicant (for all designated States except US): ENVENTURE GLOBAL TECHNOLOGY [US/US]; 16200 A Park Row, Houston, TX 77084 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): SHUSTER, Mark [US/US]; 19115 Prospect Ridge Lane, Houston, TX

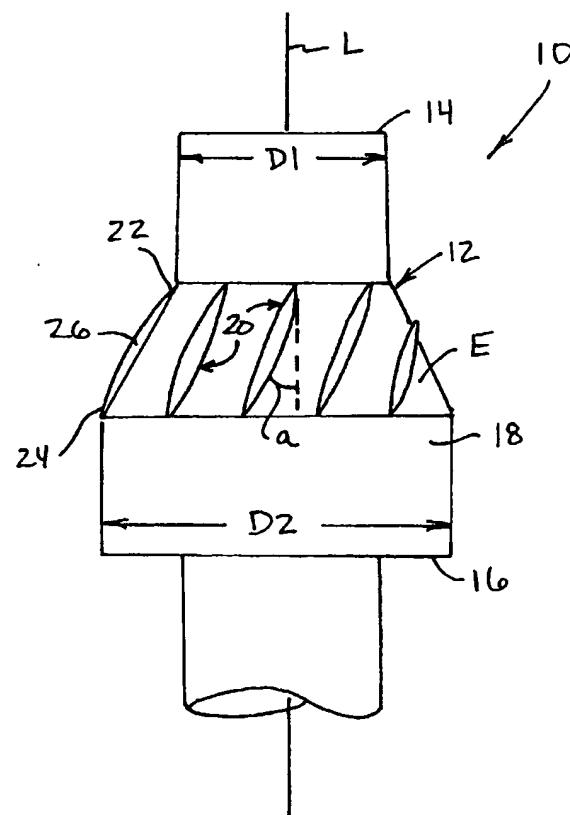
(74) Agent: MATTINGLY, Todd; Haynes and Boone, LLP, 1000 Louisiana, Suite 4300, Houston, TX 77002-5012 (US).

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(54) Title: ROTATING MANDREL FOR EXPANDABLE TUBULAR CASING



(57) Abstract: An expansion mandrel (10) for expanding tubular casing includes a tapered expansion portion having expansion segments (20) which are angularly disposed on an external surface of the mandrel (10). The segments (20) reduce friction and cause the mandrel (10) to rotate in response to the mandrel (10) being moved through the casing during expansion of the casing.

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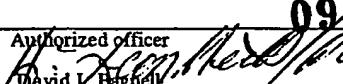
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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER		
IPC(7) : E21B 23/00 US CL : 166/207,384 According to International Patent Classification (IPC) or to both national classification and IPC		
B. FIELDS SEARCHED		
Minimum documentation searched (classification system followed by classification symbols) U.S. : 166/207,384,206,380		
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched		
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6,325,148 A (Traban et al.) 4 December 2001 (04.12.2001), Fig. 9 and col. 6, lines 10-35.	1-3, 4, 9, 13-15, 17, 20
X, P	US 6,457,532 A (Simpson) 1 October 2002 (01.10.2002), Figs. 20, 22-24, and col. 12, line 27- col. 14, line 9.	1-7, 13-17, 19
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Y, P	US 1,597,212 A (Spengler) 24 August 1926, (24.08.1926), Entire document, particularly Figure 1.	8, 10-12, 18, 21-22
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X	US Patent Application Publication 2003/0075338 (Sivley), 24 April 2003 (24.04.2003), Fig. 10 and paragraph 0118 on pages 9-10.	1-5, 13-16
X	US 3,039,530 A (Condra) 19 June 1962 (19.06.1962), Fig. 1, col. 1, lines 7-12.	1-3, 6, 9
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Name and mailing address of the ISA/US Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (703)305-3230		Authorized officer  David J. Bagwell Telephone No. 703-308-1113